

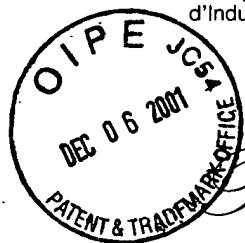


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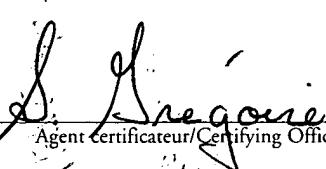
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Specification and Drawings, as originally filed, with Application for Patent Serial No:
2,273,320, on May 27, 1999, by **DAVID MITCHELL**, for "Improved Rake".


Agent certificateur/Certifying Officer

February 16, 2000

Date

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ABSTRACT

An improved rake comprising a first rake part having a handle and a first rake head section connected to one end of the handle, and a second rake part having a second rake head section. The second rake part is detachably connected to the first rake part in a manner to have the first and second rake head sections form a full rake head. The second rake part is detachable from the first rake part for use alone, or with the first rake part to grasp a pile of debris.

IMPROVED RAKE

FIELD OF INVENTION

This invention is directed toward an improved rake. The invention is more particularly directed an improved rake comprising two detachably connected rake parts. With the two rake parts connected, a normal rake is formed which is used to rake debris, such as leaves, together in a pile. With the two rake parts detached, the parts are used to grasp the debris pile between them to transfer the pile to a container or the like.

BRIEF DESCRIPTION OF THE FIGURES IN THE DRAWINGS

Fig. 1 is a perspective view of the rake in a leaf raking mode;

Fig. 2 is perspective, exploded, view of the rake showing the two parts of the rake;

Fig. 3 is a view showing the detached parts of the rake in use;

Fig. 4 is a cross-section view of the one part of the rake taken along line 4-4 in Fig. 2;

Fig. 5 is a cross-section view of the other part of the rake taken along line 5-5 in Fig. 2;

Fig. 6 is a cross-section view taken along line 6-6 in Fig. 1; and

Fig. 7 is a view similar to Fig. 6 showing how one part of the rake is detached from the other part of the rake.

DESCRIPTION OF THE PREFERRED EMBODIMENT OF THE INVENTION

The rake 1 of the present invention as shown in Figs. 1 and 2, is in two parts 3, 5. The first rake part 3 has a first rake head section 7 attached at one end to one end of a rake handle 9.

The second rake part 5 has a second rake head section 11 and is detachably connected to the first rake part 3. When the second rake part 5 is connected to the first rake part 3, the first and second rake head sections 7, 11 together form a normal rake head 13, as shown in Fig. 1 and the rake formed by the two connected parts can be used in a normal manner to rake debris, such as leaves into a pile. When the second rake part 5 is detachably disconnected from the first rake part 3, the two parts can be used, one in each hand as shown in Fig. 3, to grasp the pile of debris between them.

In more detail, as shown in Figs. 2 and 4, the first rake head section 7, of the first rake part 3, has a base 17 with a set of tines 19 extending forwardly from one end 21 of the base 17. The tines 19 are resilient, flat strips with their free end portions 23 bent generally transversely to the rest of their length so as to more easily gather debris. A tubular extension 25 extends upwardly from the other end 27 of the base 17, the extension 25 adjacent one side 29 of the base. The tubular extension 25 snugly receives the one end of the handle 9. Fasteners 31 can pass through the handle 9 and the extension 25 to connect the first rake head section 7 to the handle 9 to form the first rake part 3. The fasteners 31 can be of the detachable or removable type to allow replacement of the handle 9 or the first rake head section 7 if either breaks.

The second rake head section 11, of the second rake part 5, as shown in Figs. 2 and 5, also has a base 35 with a set of tines 37 extending forwardly from one end 39 of the base 35. The tines 37 are the same as the tines 19 with bent free end portions 41. The second rake part 5 includes connecting means 43 for detachably connecting the second rake part 5 to the first rake part 3. The connecting means 43 can comprise a part-tubular extension 45 which extends from the other end 47 of the base 35 of the second rake head section 11, adjacent one side 49 of the base 35. This part-

tubular extension 45 is open along one side as shown at 51 allowing it to expand. The extension 45 has a pair of spaced-apart, part-circular ribs 53 on its inner surface sized to fit snugly over the handle 9 just above the extension 25 of the first rake head section 7 as shown in Fig. 6.

To assemble the rake 1, the tubular extension 45 on the second rake part 5 is "snapped" over the handle 9 of the first rake part 3 with the ribs 53 partly encircling the handle 9. When attached to the handle 9, the lower portion of the extension 45 partly overlies the top of the extension 25. When connected together, the one side 29 of the base 17 of the first rake head section 7 is adjacent the one side 49 of the base 35 of the second rake head section 11 as shown in Fig. 1. Also, one side 55 of the tines 19 on the first rake head section 7 is adjacent the one side 57 of the tines 37 on the second rake head section 11 to form the rake head 13 of the rake.

Second connecting means 61 can be provided to further connect the two rake head sections 7, 11 of the two parts 3, 5 together. The second connecting means 61 can comprise an outwardly and downwardly extending hook 63 on the base 17 of the first rake head section 7. More particularly, the hook 63 is located on a flange 64 that extends laterally from the side 29 of the base 17, the flange forming a part of the base. The hook 63 is located below the tubular extension 25, which is also carried on the flange 64, and just above the tines 19. An opening 65 is located on the base 35 of the second rake head section 11 just above the tines 37 and adjacent the one side 57 of the base 35. The hook 63 is slid through the opening 65 to have its tip 67 rest on the base 35 when the extension 45 is snapped over the handle 9. The hook tip 67, bearing on the base 35 when the two rake head sections 7, 11 are assembled, prevents the rake head sections from separating and rotating relative to each in one direction, and also maintains the tines 19, 37 of both sections aligned.

A flange 71 extends from the one side 49 of the base 35 of the second rake head section 11 to overlie the base 17 of the first rake head section 7 when the sections are connected together. This flange 71 prevents the second rake head section 11 from rotating in the other direction relative to the first rake head section 7 when the rake is assembled and also helps maintain the tines 19, 37 of both rake head sections aligned.

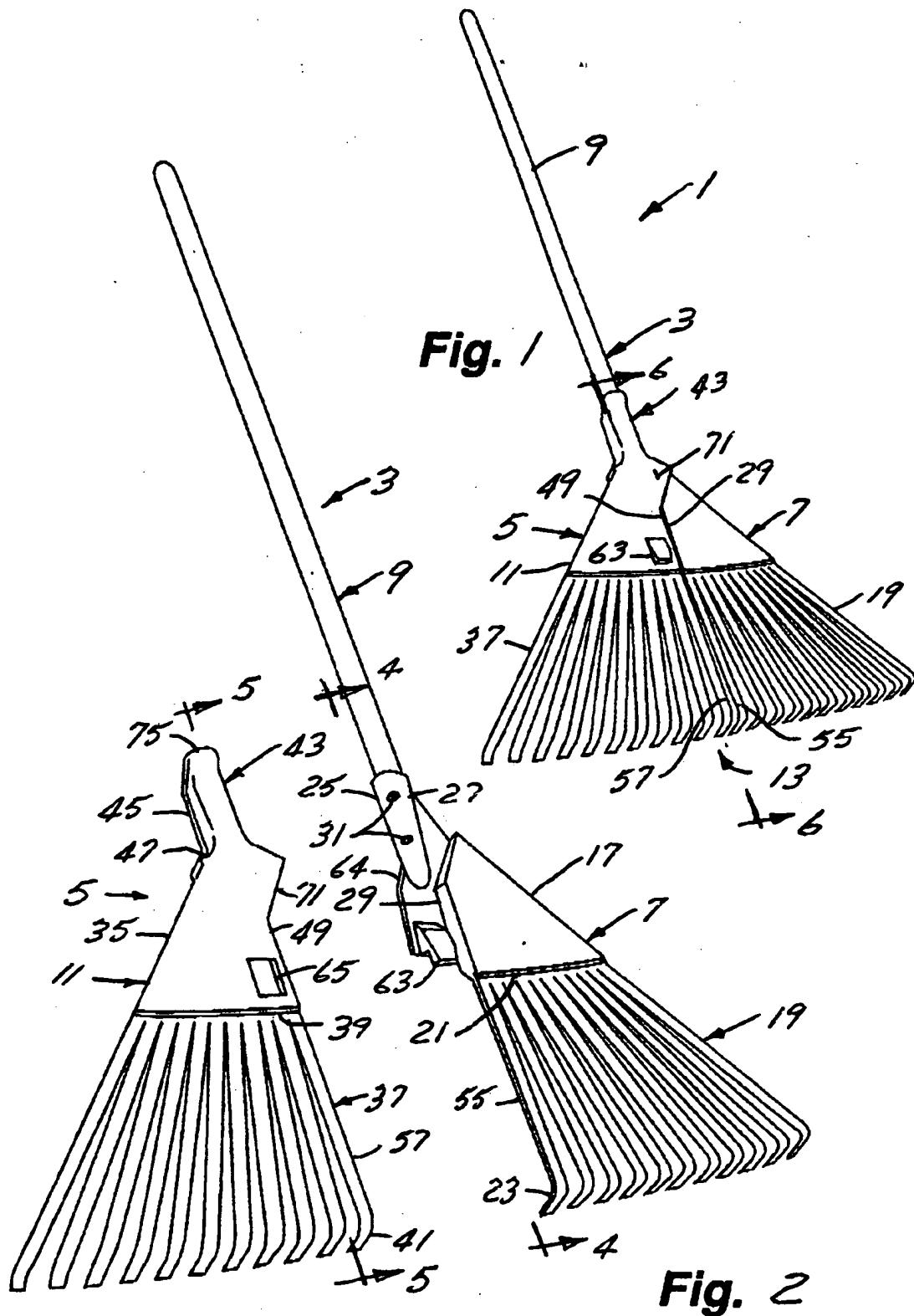
When the rake 1 is assembled, as shown in Fig. 1, the two rake head sections 7, 11 together provide a rake head 13 of normal width. The assembled rake 1 is used to rake debris such as leaves into a pile. Once the pile has been formed, the second rake part 5 is detached from the first rake part 3. To facilitate detachment, the upper end 75 of the part-tubular extension 45 can be flared slightly outwardly so this upper end can more easily be snapped off the handle 9. The part-tubular extension 45 on the first rake part 3 forms a handle which can be grasped with one hand and the second rake 5 is grasped with the other hand as shown in Fig. 3 to be manipulated to grasp the pile of leaves between them to transfer the leaves to a container.

The rake is easily reassembled by manipulating the second rake part 5 to slide the hook 63 on the first rake part 3 into the opening 65 as shown in Fig. 7 and then pivoting the second rake part 5 relative to the first rake part 3 to snap the upper end of the second rake part onto the handle 9 to form the assembled rake 1 shown in Fig. 1.

While the first rake head section has been shown to be about the same width as the second rake head section, one section could be wider than the other. Also, while the second rake part has been shown to be attached to the handle of the first rake part, it could also be attached to the second rake head section by suitable attachment means.

I CLAIM:

1. A rake comprising: a first rake part having a handle and a first rake head section connected to one end of the handle; a second, separate, rake part having a second rake head section; and connecting means detachably connecting the second rake part to the first rake part to have the first and second rake head sections form a rake head at the end of the handle; the connected rake parts forming the rake used to rake debris into a pile, the detached rake parts used to grasp the pile of debris between them.



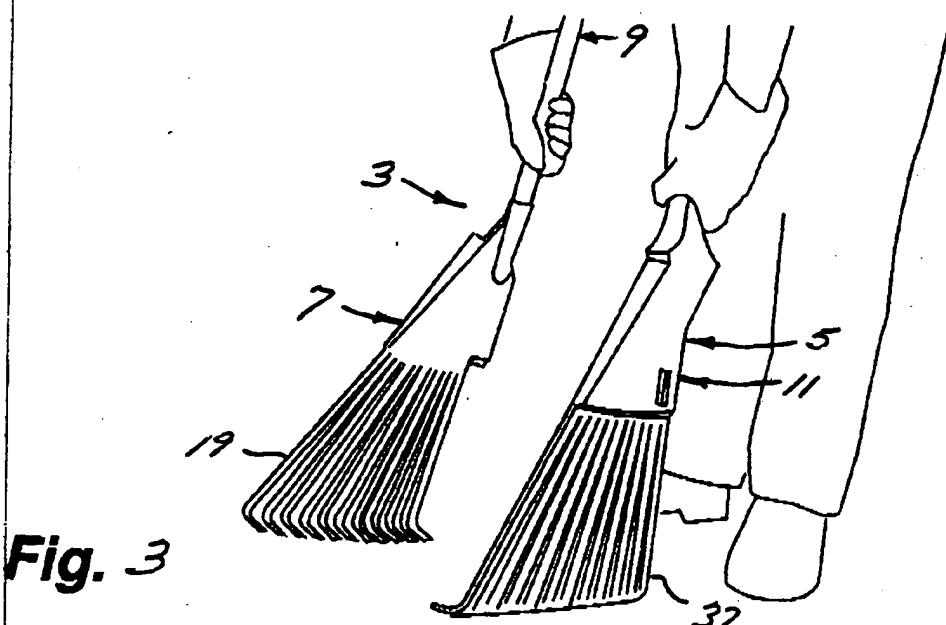


Fig. 3

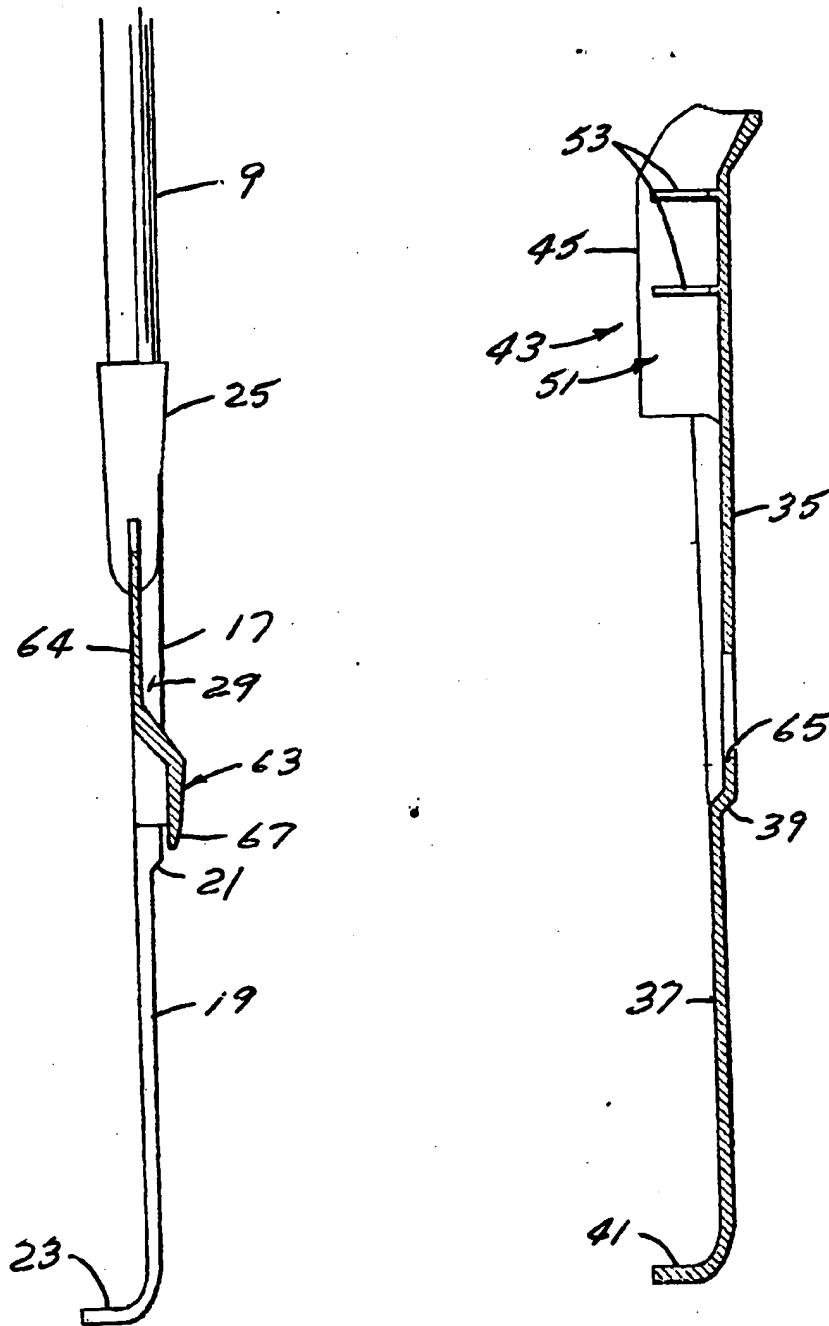


Fig. 4

Fig. 5

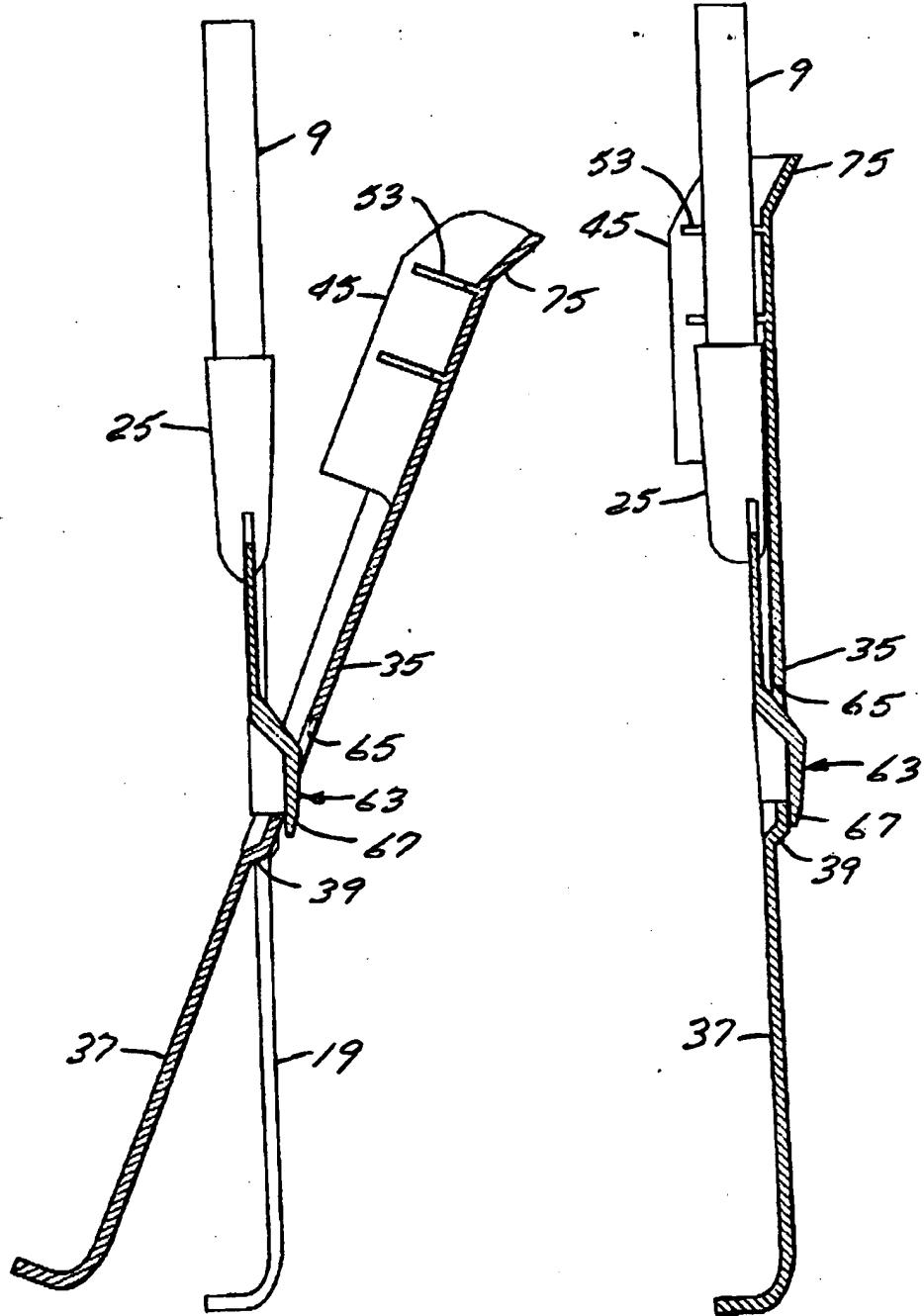


Fig. 7

Fig. 6